

CANADA

NUMBER

486016

To all to whom these presents shall come

Whereas

Peter N. Ottersland,

of Watertown,

New York,

U.S.A.,

has petitioned the Commissioner of Patents, praying for the grant of a Patent for an invention entitled Chippers,

a description of which invention is contained in the specification of which a duplicate is herewith attached, and made an essential part hereof, and has complied with the requirements of the Patent Act.

Now Therefore the present Patent grants to the said

Peter N. Ottersland,

and his legal representatives for the period of Seventeen Years from the date of these presents the exclusive right, privilege and liberty of making, constructing, using and vending to others to be used in Canada the said invention subject to adjudication in respect thereof before any court of competent jurisdiction.

Provided that the grant hereby made is subject to the conditions contained in Act aforesaid.

In Testimony Whereof, I have hereunto set my hand, and caused the Seal of the Patent Office to be hereunto affixed, at the City of Ottawa, in Canada, this Twenty-sixth day of August in the year of Our Lord, one thousand nine hundred and fifty two

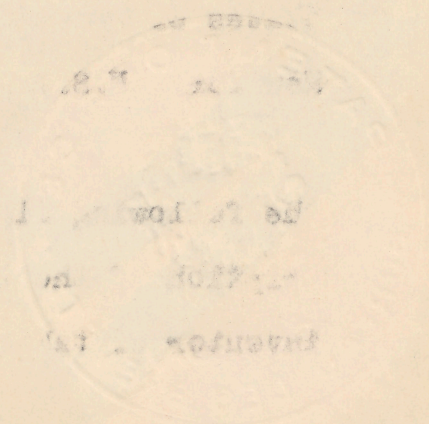
W. M. L.
Commissioner of Patents.

REPRESENTATIVE IN CANADA.
Entered under Section 30, of the
Patent Act 1935.

Name *C. H. Riches & Sons,*

Address *67 Yonge St.,*

Toronto, Ontario.



S P E C I F I C A T I O N

BE IT KNOWN THAT PETER N. OTTERS LAND, a citizen of the United States of America, of 221 South Indiana Avenue, Watertown, New York, U.S.A., having made an invention entitled:

"CHIPPERS"

the following disclosure contains a correct and full description of the invention and of the best mode known to the inventor of taking advantage of the same.

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This invention relates to CHIPPERS which are used for cutting or chipping logs into chips suitable for use in paper pulp machines.

Chippers of the character described are usually so constructed that the logs are fed in a direction substantially at a 45° angle to the plane of operation of the cutting knives or of the chipper disk which carries the knives. Thus the knives cut substantially across the grain of the wood being cut. This operation results in chips which are badly bruised and irregular at their ends.

This invention has for its salient object to provide a chipper so constructed and arranged that the chips will be cleanly cut at the ends and will not be slabbed off.

Further objects of the invention will appear from the following specification taken in connection with the drawing which illustrates in side elevation and partly in section a chipper constructed in accordance with the invention.

In the particular embodiment of the invention shown in the drawing, the chipper comprises a disk 10 mounted on a shaft 11 supported in bearings 12 and 13. The disk 10 is enclosed in a casing 14.

The shaft bearings are supported on bearing supports 15 and 16 which, in turn, are mounted on a base 17. The base 17 is mounted at an angle on a bed plate 18 by suitable supporting members, such as block 19.

The chipper disk 10 has knives 20 mounted thereon and radiating from the axis of the disk and in back of each knife 20 is a slot 21 for receiving the chips.

The logs are fed to the chipper disk and knives through a chute 25, the axis of the chute being disposed approximately at an angle of 60° to the axis of the disk and approximately at an angle of 30° to the plane of the disk 10 and of the knives 20.

It has been found that a cut more lengthwise or in the direction of the grain produces better chips and when the log is fed through the chute at an angle of approximately 30° to the plane of operation of the knives, a better chip is produced. However, when the log is so fed and has been cut to a length of approximately 10 inches, it is then slabbed off parallel to the grain instead of in chips. Therefore, in order to get the log more nearly horizontal as it is fed to the chipper and to still feed the log at an angle of approximately 30° to the plane of the disk and knives, the base 17 of the chipper is tilted and supported at an angle to the bed 18 as, for instance, at an angle of approximately 15° to 20° .

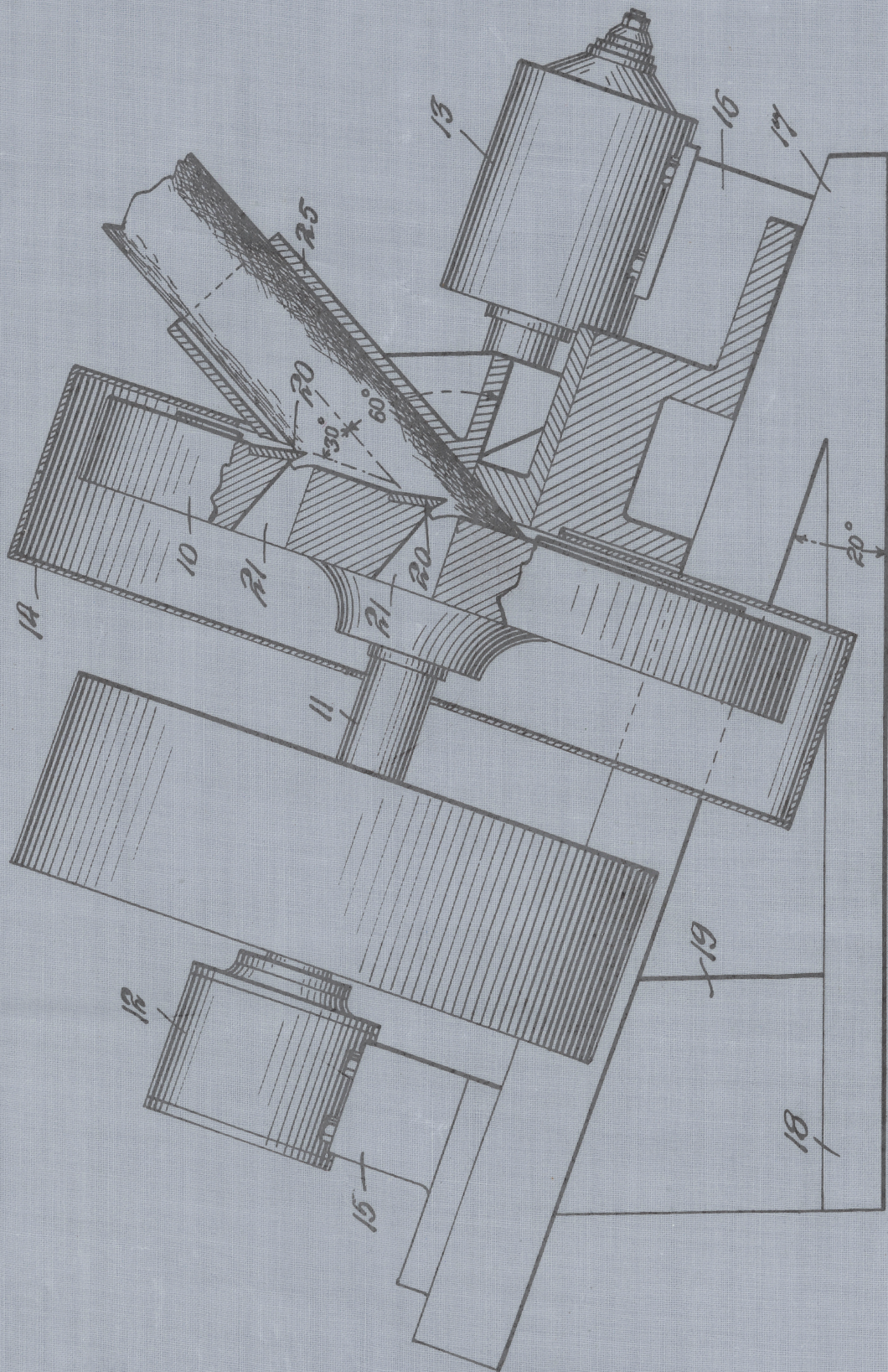
In this way the log will remain stable as it is fed and the cuts will be made more nearly lengthwise of the grain than has heretofore been possible.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that changes in the construction and in the arrangement of the cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A chipper for chipping logs comprising a shaft, bearings for the shaft, a chipper disk mounted on and disposed at right angles to the shaft, a gravity feed chute inclined at an acute angle to the disk, and means for supporting the disk shaft with the axis of the shaft inclined at an acute angle to the horizontal and the chipper disk facing downwardly and the feed chute inclined to the horizontal at about 50° or less, whereby the gravity component on the log is increased in the direction of the bottom of the chute to maintain the bottom contact between the log and the chute throughout the length of the logs.

2. A chipper for chipping logs comprising a shaft, bearings for the shaft, a chipper disk mounted on the shaft and disposed at right angles thereto and facing downwardly, knives on the disk, an inclined chute for feeding logs by gravity to the chipper disk, the axis of the chute being inclined away from the plane of the chipper disk approximately 30° , and means for supporting the shaft at an angle to the horizontal and the chute axis at an angle of approximately 40° to the horizontal whereby the gravity component on the log is increased in the direction of the bottom of the chute to maintain the bottom contact between the log and the chute throughout the length of the logs.



PETER N. OTTERS LAND
INVENTOR

Charles H. Riches & Sons

ATTORNEY

The attention of Patentees is called to the following section of The Patent Act, 1935.

Abuse of rights under patents.	"65. (1) The Attorney General of Canada or any person interested may at any time after the expiration of three years from the date of the grant of a patent apply to the Commissioner alleging in the case of that patent that there has been an abuse of the exclusive rights thereunder and asking for relief under this Act.
What amounts to such abuse.	(2) The exclusive rights under a patent shall be deemed to have been abused in any of the following circumstances:—
Not working, patented invention.	(a) If the patented invention (being one capable of being worked within Canada) is not being worked within Canada on a commercial scale, and no satisfactory reason can be given for such non-working:
Proviso.	Provided that, if an application is presented to the Commissioner on this ground, and the Commissioner is of opinion that the time which has elapsed since the grant of the patent has by reason of the nature of the invention or for any other cause been insufficient to enable the invention to be worked within Canada on a commercial scale, the Commissioner may make an order adjourning the application for such period as will in his opinion be sufficient for that purpose;
Prevention of working by importation.	(b) If the working of the invention within Canada on a commercial scale is being prevented or hindered by the importation from abroad of the patented article by the patentee or persons claiming under him, or by persons directly or indirectly purchasing from him, or by other persons against whom the patentee is not taking or has not taken any proceedings for infringement;
Not meeting demand.	(c) If the demand for the patented article in Canada is not being met to an adequate extent and on reasonable terms;
Prejudice to trade by refusal to licence.	(d) If, by reason of the refusal of the patentee to grant a licence or licences upon reasonable terms, the trade or industry of Canada or the trade of any person or class of persons trading in Canada, or the establishment of any new trade or industry in Canada, is prejudiced, and it is in the public interest that a licence or licences should be granted;
Prejudice by reason of conditions attached.	(e) If any trade or industry in Canada, or any person or class of persons engaged therein, is unfairly prejudiced by the conditions attached by the patentee, whether before or after the passing of this Act, to the purchase, hire, licence, or use of the patented article, or to the using or working of the patented process;
Prejudice in other respects.	(f) If it is shown that the existence of the patent, being a patent for an invention relating to a process involving the use of materials not protected by the patent or for an invention relating to a substance produced by such a process, has been utilized by the patentee so as unfairly to prejudice in Canada the manufacture, use or sale of any such materials.
Declaration of basis of grants of patents.	(3) It is declared with relation to every paragraph of the next foregoing subsection that, for the purpose of determining whether there has been any abuse of the exclusive rights under a patent, it shall be taken that patents for new inventions are granted not only to encourage invention but to secure that new inventions shall so far as possible be worked on a commercial scale in Canada without undue delay."

Patentees are advised to acquaint themselves with this and the other provisions of the Act.

